

**AMENDMENTS TO THE SPECIFICATION**

Please amend the Specification as follows:

Please amend paragraph [132] as follows:

[132] In accordance with a preferred optional embodiment of the present invention, the sensor can be configured as shown in FIG. 7 wherein ultraviolet radiation sensor 771, which generates a sensor signal received by a controller system 772, is located near the outlet of the post catalyst reaction zone and just before the fully combusted gas mixture enters the turbine. The system configuration shown in Fig. 7 operates similar to that of Fig. 6, with the sensor located farther from the catalyst. An advantage of the system configuration shown in Fig. 7 is that it can be used to determine when the combustion wave is near the outlet of the post catalyst reaction zone (i.e.: close to the turbine inlet). Again, the operating line can be adjusted or selected by controller system 772 as required to maintain the catalyst operation in its desired range.